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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,706	06/25/2003	Eiki Yasukawa	03248C/HG	5090

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EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/606,706

Applicant(s)

YASUKAWA ET AL.

Examiner

Julian Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006 and 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,9-11,13-15 and 18-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,4,9-11,13-15 and 18-30 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10-12-06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Remarks***

Applicant's statement of the substance of the March 6, 2007 telephone interview with the undersigned examiner is herein acknowledged. Applicant on page 1 of the statement submits that "[t]here are errors in the February 27, 2007 Office Action (final rejection), which indicate that the Examiner did not fully consider the AMENDMENT UNDER 37 CFR 1.111 dated October 12, 2006." As a matter of record, and as communicated to applicant's representative during the telephone discussion, applicant's amendment dated October 12, 2006 was in fact entered into the application *much later* than presently stated—said amendment was actually entered as a separate paper on November 30, 2006. See page one of the November 30, 2006 communication, where in applicant's own words it states that "Ms. Allen informed the undersigned that the AMENDMENT UNDER 37 CFR 1.111 dated October 12, 2006 *has not been scanned into the file....*" (emphasis added)

Furthermore, and as communicated to applicant during the telephone discussion, the "errors in the February 27, 2007 Office action" as delineated by applicant are nominally correct, but only insofar as the examiner (to the best of his knowledge at that time) was misled into thinking that applicant's response to the July 12, 2006 Office action consisted solely of the Declaration under 37 CFR 1.132, which was nonetheless considered. In view of the foregoing, this Office action is intended to replace the prior February 27, 2007 Office action and is deemed responsive to applicant's amendment filed on November 30, 2006 as well as the declaration filed on October 16, 2006. This Office action is made FINAL with the period for reply restarted.

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Claims 3, 4, 9-11, 13-15 and 18-30 are pending.

Claim Objections

The objection to claim 30 has been withdrawn.

Claim 17 is objected to because of the following informalities:

1. Claim 17 presently has the status identifier “(original)”, however, claim 17 has been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species. It is suggested to change the claim identifier for claim 17 from “(original)” to --(withdrawn)--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102 and 103

The rejection of claims 3, 4, 8-15, 18 and 19 under 35 U.S.C. 102(b) based on Tan et al. (JP 11-260401) has been withdrawn.

The rejection of claims 20-27 under 35 U.S.C. 103(a) based on Tan et al., Sonobe et al. and Kameda et al. has been withdrawn.

The rejection of claims 28-30 under 35 U.S.C. 103(a) based on Tan et al., Sonobe et al., Kameda et al. and Watanabe et al. has been withdrawn.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 9-11, 13-15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable Tan et al. (JP 11-260401) in view of Yoshimura et al. (JP 4-087156).

The teachings of Tan et al. are maintained for the reasons of record and for the additional reasons to follow. The examiner notes the present amendment to claim 3 now reciting the non-aqueous solvent to comprise ~~at least one compound selected from~~ (c1) a vinylene carbonate compound and (c2) a vinylethylene carbonate compound. Stated differently, claim 3 now requires both a vinylene carbonate compound and a vinylethylene carbonate compound.

As discussed in a prior Office action, Tan teaches a lithium secondary battery having a phosphate compound (a) in both chain (a1) and cyclic (a2) forms, a cyclic carboxylate compound (b1) such as gamma butyrolactone and a compound (c1) of a vinylene carbonate derivative. See Formula 4, par. [0033] and Formula 1, respectively.

Tan et al. does not explicitly teach a vinylethylene carbonate compound. However, Yoshimura et al. teaches, in a similar application for a non-aqueous electrochemical cell, that vinylethylene carbonate as a solvent “suppresses the reaction between ethylene carbonate and the negative lithium electrode....” (page 5 of the translation) Thus, at the time the invention was made, the skilled artisan would find obvious to modify Tan et al.’s invention by employing vinylethylene carbonate as part of the electrolyte solvent. The motivation for such a modification would be so that “a decrease in the discharge characteristic after storing can be prevented.” (ib.)

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Applicant's arguments filed with the present amendment have been fully considered, but are moot in view of the new ground(s) of rejection based on Tan et al. in view of Yoshimura et al.

Claims 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al. in view of Yoshimura et al., and further in view of Sonobe et al. and Kameda et al.

The teachings of Tan et al. in view of Yoshimura et al. are discussed above. The rejection based on Tan et al. when further in view of Sonobe et al. and Kameda et al. is maintained for the reasons of record.

Applicant's arguments filed with the present amendment have been fully considered, but are moot in view of the new ground(s) of rejection based on Tan et al. in view of Yoshimura et al.

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tan et al. in view of Yoshimura et al., Sonobe et al. and Kameda et al., and further in view of Watanabe et al. (U.S. Pat. 6,682,856 B1).

The teachings of Tan et al. in view of Yoshimura et al., Sonobe et al. and Kameda et al. are discussed above. The rejection based on Tan et al. when further in view of Watanabe et al. is maintained for the reasons of record.

Applicant's arguments filed with the present amendment have been fully considered, but are moot in view of the new ground(s) of rejection based on Tan et al. in view of Yoshimura et al.

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The declaration under 37 CFR 1.132 filed on October 16, 2006 is insufficient to overcome the rejection of claims 3, 4, 9-11, 13-15 and 18-30 based upon the cited references as set forth in the last Office action because evidence of unexpected results must compare the claimed invention with the closest prior art. In view of applicant's amendment, the closest prior art is presently Tan et al. in view of Yoshimura et al. Furthermore, to the extent that the alleged advantageous results shown by the declaration may be applicable in view of the new ground of rejection(s) based on Tan et al. in view of Yoshimura et al., the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP 1700